



Ni Reservoir Management Report Popular Report Federal Aid Project – F111R11 2003

Ni Reservoir is a 411-acre water supply impoundment located in Spotsylvania County near Chancellorsville, Virginia. This waterbody was initially stocked in 1974 with bluegill and redear sunfish, followed by largemouth bass and channel catfish in 1975 and 1976. Past stockings also included tiger muskie (1978-1983), hybrid striped bass (1986-1986), and walleye (1987-1993, 1995-1996). Stocking of pelagic predators (i.e. tiger muskie, hybrid striped bass, and walleye) was discontinued due to poor survival, low angler catch rates, and changes in management philosophies. Currently, the fishery is comprised of self-sustaining populations of bluegill, redear sunfish, chain pickerel, channel catfish, black crappie, largemouth bass, and white perch.

DGIF fisheries biologists sample the fishery approximately every three to five years. Most recently, an electrofishing sample was conducted in May of 2002. Biologists employ numerical descriptors of length-frequency data such as Proportional Stock Density (PSD) and Relative Stock Density (RSD) when evaluating fish populations. Proportional Stock Density is calculated by dividing the number of fish \geq minimum quality length by the number of fish \geq minimum stock length x 100. Quality length is defined as the minimum size of fish most anglers like to catch. Stock length is the minimum length at which a fish provides recreational value. Relative Stock Density (RSD) is simply the percentage of any designated length group found within a population. RSD is calculated by dividing the number of fish \geq specified length by the number of fish > minimum stock length x 100.

The population structure of largemouth bass continues to improve, with Proportional Stock Density (PSD) values increasing significantly (PSD 59) over previous samples in 1992 and 1996 (PSD's 34, 46). Relative Stock Density of "Preferred" fish

(RSD-P) greater than 15" increased to 26 in 2002, which is considerably higher than RSD-P values in previous sample years (9, 21). Angler success should be very good at Ni Reservoir with plenty of bass larger than 15" available for the catching.

Anglers after panfish (black crappie, bluegill, redear sunfish, and white perch) should experience good success at Ni Reservoir. Currently, PSD values for bluegill (PSD 31) and redear sunfish (PSD 49) lie well with in the expected range for a balanced population (PSD range 20-60). Anglers can expect to catch these scrappy panfish in the 4"-8" range, which are just right for the skillet. White perch are abundant throughout the reservoir and are an underutilized resource that anglers are encouraged to harvest.

Spotsylvania County Parks and Recreation operates a concession at the lake where anglers can purchase a daily/or annual fishing permits for the lake, rent/launch boats, or buy snacks. Reciprocal annual fishing permits are available to residents of Spotsylvania, Stafford, and the city of Fredericksburg, which allows seasonal access to Ni Reservoir and Mott's Run Reservoir. Ni Reservoir can be reached from I-95 by taking Rt. 3 west to Rt. 627 south.

For more information on Ni Reservoir please contact:

Spotsylvania Parks and Recreation Department 540-898-7529 or the concession at 540-786-2284

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